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Substitute for form 1465PTO		Complete if Known		
<b>INFORMATION DISCLOSURE STATEMENT BY APPLICANT</b>  (Use as many sheets as necessary)		<b>Application Number</b>	10/531,078	
		<b>Filing Date</b>	2003-10-15	
		<b>First Named Inventor</b>	GAINEY, Kenneth M.,	
		<b>Art Unit</b>	2618	
		<b>Examiner Name</b>	Sanh D. Phu	
<b>Sheet</b>	1	of	9	<b>Attorney Docket No:</b> 080590

U.S. PATENT DOCUMENTS					
Examiner Initials*	Cite No. <sup>1</sup>	Document Number Number-Kind Code <sup>2a</sup> if (known)	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear
	001	US4777653	10-11-1988	BONNEROT; Georges, et al.	
	002	US5095528	03-10-1992	LESLIE; Samuel A., et al.	
	003	US5280480	01-18-1994	PITT; Daniel A., et al.	
	004	US5333175	07-26-1994	ARIYAVISITAKUL; Sirikit, et al.	
	005	US5383144	01-17-1995	KATO; Shiro	
	006	US5732334	03-24-1998	MIYAKE; Atsushi	
	007	US5767788	06-16-1998	NESS; James C.	
	008	US5815795	09-29-1998	IWAH; Tohru	
	009	US5825809	10-20-1998	SIM; Bok-Tae	
	010	US6215982	04-10-2001	TROMPOWER; Michael L.	
	011	US6377612	04-23-2002	BAKER, Kenneth R.	
	012	US6404775	06-11-2002	LESLIE; Samuel A., et al.	
	013	US6480481	11-12-2002	PARK; Su-Won, et al.	
	014	US6535732	03-18-2003	MCINTOSH; Chris P., et al.	
	015	US6539028	03-25-2003	SOH; Kok Hong, et al.	
	016	US6549542	04-15-2003	DONG; Sung-Soo, et al.	
	017	US6694125	02-17-2004	WHITE; Stanley A., et al.	
	018	US6766113	07-20-2004	AL-SALAMEH; Daniel Y., et al.	
	019	US7043203	05-09-2006	MIQUEL; Xavier Barba, et al.	

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 For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document. - Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST 16 if possible. - Applicant is to place a check mark here if English language translation is attached. This collection of information is required by 37 CFR 1.97 and 1.98. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 2 hours to complete including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.  
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Substitute for form 1449PTO				<b>Complete if Known</b> <b>Application Number</b> 10/531,078 <b>Filing Date</b> 2003-10-15 <b>First Named Inventor</b> GAINEY, Kenneth M., <b>Art Unit</b> 2618 <b>Examiner Name</b> Sanh D. Phu	
<b>INFORMATION DISCLOSURE STATEMENT BY APPLICANT</b> (Use as many sheets as necessary)				<b>Attorney Docket No:</b> 080590	
<b>Sheet</b>	<b>2</b>	<b>of</b>	<b>9</b>		

U.S. PATENT DOCUMENTS					
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		Number-Kind Code <sup>2,if known</sup>			
	020	US7123670	10-17-2006	GILBERT; Jeffrey M., et al.	
	021	US7132988	11-07-2006	YEGIN; Korkut, et al.	
	022	US7133460	11-07-2006	BAE; Sang-Min, et al.	
	023	US7409186	08-05-2008	VAN BUREN; V. Alan, et al.	
	024	US7430397	09-30-2008	SUDA; Hirohito, et al.	
	025	US7486929	02-03-2009	VAN BUREN; V. Alan, et al.	
	026	US7623826	11-24-2009	PERGAL; Frank	
	027	US20010018328	08-30-2001	OHKURA; Yoshinori, et al.	
	028	US20010040699	11-15-2001	OSAWA; Hidefumi, et al.	
	029	US20010050580	12-13-2001	O'toole; James E., et al.	
	030	US20010050906	12-13-2001	ODENWALDER; Joseph P., et al.	
	031	US20020004924	01-10-2002	KIM; Min-Koo, et al.	
	032	US20020034958	03-21-2002	OBERSCHMIDT; Gerald, et al.	
	033	US20020109585	08-15-2002	SANDERSON, Lelon Wayne	
	034	US20020119783	08-29-2002	BOURLAS; Yair, et al.	
	035	US20020141435	10-03-2002	NEWBERG; Donald G., et al.	
	036	US20020159506	10-31-2002	ALAMOUTI; Siavash, et al.	
	037	US20030026363	02-06-2003	STOTER; Jan, et al.	
	038	US20030185163	10-02-2003	BERTONIS; James G., et al.	

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Substitute for form 1462/PTO  <b>INFORMATION DISCLOSURE STATEMENT BY APPLICANT</b>  (Use as many sheets as necessary)				Complete if Known <b>Application Number</b> 10/531,078 <b>Filing Date</b> 2003-10-15 <b>First Named Inventor</b> GAINEY, Kenneth M., <b>Art Unit</b> 2618 <b>Examiner Name</b> Sanh D. Phu
<b>Sheet</b>	3	<b>of</b>	9	<b>Attorney Docket No:</b> 080500

U.S. PATENT DOCUMENTS					
Examiner Initials*	Cite No. <sup>1</sup>	Document Number Number-Kind Code <sup>2a</sup> (known)	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear
	039	US20030211828	11-13-2003	DALGLEISH, Robert, et al.	
	040	US20040029537	02-12-2004	PUGEL, Michael Anthony, et al.	
	041	US20040157551	08-12-2004	GAINEY, Kenneth M., et al.	
	042	US20040208258	10-21-2004	LOZANO, Angel, et al.	
	043	US20040235417	11-25-2004	DEAN, Richard F.	
	044	US20040248581	12-09-2004	SEKI, Hiroyuki, et al.	
	045	US20050201315	09-15-2005	LAKKIS, Ismail	
	046	US20060035643	02-16-2006	VOOK, Frederick W., et al.	
	047	US20060052066	03-09-2006	CLEVELAND, Joseph R., et al.	
	048	US20060052099	03-09-2006	PARKER, Jeffrey L.	
	049	US20060203757	09-14-2006	YOUNG, Shane, et al.	
	050	US20070025349	02-01-2007	BAJIC, Zeljko	
	051	US20070121546	05-31-2007	ZUCKERMAN, Gal, et al.	
	052	US20080057862	03-06-2008	SMITH, James P.	

FOREIGN PATENT DOCUMENTS					
Examiner Initials*	Cite No. <sup>1</sup>	Foreign Patent Document	Publication Date	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where

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 See Kinds Codes of USPTO Patent Documents at [www.uspto.gov](http://www.uspto.gov) or MPEP 901.04. \*Enter Office that issued the document, by the two-letter code (WIPO Standard ST 3) 3  
 For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document. \*Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST 16 if possible. \*Applicant is to place a check mark here if English language Translation is attached. This collection of information is required by 37 CFR 1.97 and 1.98. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 2 hours to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

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Substitute for form 1449/PTO				Complete if Known <b>Application Number</b> 10/531,078 <b>Filing Date</b> 2003-10-15 <b>First Named Inventor</b> GAINEY, Kenneth M., <b>Art Unit</b> 2618 <b>Examiner Name</b> Sanh D. Phu	
<b>INFORMATION DISCLOSURE STATEMENT BY APPLICANT</b>  (Use as many sheets as necessary)				<b>Attorney Docket No:</b> 080590	
<b>Sheet</b>	<b>4</b>	<b>of</b>	<b>9</b>		

		Country Code <sup>3</sup> - Number <sup>2</sup> Kind Code <sup>5</sup> (if known)	MM-DD-YYYY		Relevant Passages or Relevant Figures Appear	T
	053	EP0709973A1	05-01-1996	NTT MOBILE COMMUNICATIONS NETWORK INC.		<input type="checkbox"/>
	054	EP0715423	06-05-1996	AT & T CORP [US]		<input type="checkbox"/>
	055	EP0847146A2	06-10-1998	NEC CORP [JP]		<input type="checkbox"/>
	056	EP0853393A1	07-15-1998	NTT MOBILE COMMUNICATIONS NETWORK INC.		<input type="checkbox"/>
	057	GB2351420A	12-27-2000	MOTOROLA LTD.		<input type="checkbox"/>
	058	JP05063623	03-12-1993	NEC CORP.		<input checked="" type="checkbox"/>
	059	JP05102907	04-23-1993	FUJITSU LTD.		<input checked="" type="checkbox"/>
	060	JP06334577	12-02-1994	NIPPON TELEGRAPH & TELEPHONE.		<input checked="" type="checkbox"/>
	061	JP07030473	01-31-1995	NIPPON TELEGRAPH & TELEPHONE.		<input checked="" type="checkbox"/>
	062	JP07079205	03-20-1995	NIPPON TELEGRAPH & TELEPHONE.		<input checked="" type="checkbox"/>
	063	JP09018484A	01-17-1997	TEC CORP.		<input checked="" type="checkbox"/>
	064	JP09182155	07-11-1997	HITACHI LTD.		<input checked="" type="checkbox"/>
	065	JP10032567A	02-03-1998	NEC CORP.		<input checked="" type="checkbox"/>
	066	JP10135892	05-22-1998	MITSUBISHI ELECTRIC CORP.		<input checked="" type="checkbox"/>
	067	JP11055713	02-26-1999	MATSUSHITA ELECTRIC IND CO LTD.		<input checked="" type="checkbox"/>
	068	JP11127104	05-11-1999	MATSUSHITA ELECTRIC IND CO LTD.		<input checked="" type="checkbox"/>
	069	JP2000031877	01-28-2000	SHARP CORP.		<input checked="" type="checkbox"/>
	070	JP2000082983A	03-21-2000	KOKUSAI ELECTRIC CO LTD.		<input checked="" type="checkbox"/>

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Substitute for form 1409/PTO		Complete if Known		
<b>INFORMATION DISCLOSURE STATEMENT BY APPLICANT</b>  (Use as many sheets as necessary)		<b>Application Number</b>	10/531,078	
		<b>Filing Date</b>	2003-10-15	
		<b>First Named Inventor</b>	GAINEY, Kenneth M.,	
		<b>Art Unit</b>	2618	
		<b>Examiner Name</b>	Sanh D. Phu	
<b>Sheet</b>	5	of	9	<b>Attorney Docket No:</b> 080590

FOREIGN PATENT DOCUMENTS						
Examiner Initials*	Cite No. <sup>1</sup>	Foreign Patent Document Country Code <sup>3</sup> Number <sup>4</sup> Kind Code <sup>5</sup> (if known)	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear	T
	071	JP2000269873	09-29-2000	KOKUSAI ELECTRIC CO LTD.		<input checked="" type="checkbox"/>
	072	JP2000502218T	02-22-2000	QUALCOMM INC.		<input checked="" type="checkbox"/>
	073	JP2001111575A	04-20-2001	MATSUSHITA ELECTRIC IND CO LTD.		<input checked="" type="checkbox"/>
	074	JP2001244864A	09-07-2001	HITACHI LTD.		<input checked="" type="checkbox"/>
	075	JP2002033691	01-31-2002	SONY INT EUROP GMBH.		<input checked="" type="checkbox"/>
	076	JP2002111571A	04-12-2002	NIPPON TELEGR & TELEPH CORP.		<input checked="" type="checkbox"/>
	077	JP2005531202	10-13-2005	WIDEFI, INC.		<input checked="" type="checkbox"/>
	078	JP2005531265	10-13-2005	QUALCOMM INC.		<input checked="" type="checkbox"/>
	079	JP2006503481	01-26-2006	QUALCOMM INCORPORATED		<input checked="" type="checkbox"/>
	080	JP2006505146	02-09-2006	QUALCOMM INC [US]		<input checked="" type="checkbox"/>
	081	JP62040895	02-21-1987	TOSHIBA CORP.		<input checked="" type="checkbox"/>
	082	JP63160442	07-04-1988	HITACHI DENSHI LTD.		<input checked="" type="checkbox"/>
	083	JP64011428	01-17-1989	TOYO COMMUN EQUIP CO LTD.		<input checked="" type="checkbox"/>
	084	KR100610929	06-10-2006	SAMSUNG THALES CO LTD [KR]		<input checked="" type="checkbox"/>
	085	RU2120702C1	10-20-1998	BRITISH TELEKOMM/JUNIKEJSHN Z PABLIK LIMITED KOMPAN.		<input type="checkbox"/>
	086	WO0050971A2	08-31-2000	BERKELEY CONCEPT RESEARCH CORP [US]		<input type="checkbox"/>

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	087	WO0152447	07-19-2001	ANDREW CORPORATION [US]		<input type="checkbox"/>
	088	WO0182512A1	11-01-2001	KOREA TELECOM FREETEL CO., LTD. [KR]		<input type="checkbox"/>
	089	WO03013005A2	02-13-2003	SPOTWAVE WIRELESS INC [CA]		<input type="checkbox"/>
	090	WO04032362	04-15-2004	WIDEFI, INC.		<input type="checkbox"/>
	091	WO04038958	05-06-2004	WIDEFI, INC.		<input type="checkbox"/>
	092	WO05115022	12-01-2005	WIDEFI, INC.		<input type="checkbox"/>
	093	WO2004001986A2	12-31-2003	TANTIVY COMM INC [US]		<input type="checkbox"/>
	094	WO92014339	08-20-1992	BRITISH TELECOMMUNICATIONS.		<input type="checkbox"/>
	095	WO97034434	09-18-1997	MOTOROLA INC [US]		<input type="checkbox"/>
	096	WO9858461A1	12-23-1998	ERICSSON TELEFON AB L M [SE]		<input type="checkbox"/>
	097	WO9959264A2	11-18-1999	NOKIA NETWORKS OY [FI]		<input type="checkbox"/>
						<input type="checkbox"/>
						<input type="checkbox"/>
						<input type="checkbox"/>

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<b>Sheet</b>	7	of	9	<b>Attorney Docket No:</b> 080590

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	098	KANNANGARA, et al., "Analysis of an Adaptive Wideband Duplexer with Double-Loop Cancellation," IEEE Transactions on Vehicular Technology, vol. 56, no. 4, July 2007, pp. 1971-1982.	<input type="checkbox"/>	
	099	KUTLU, et al., "Performance Analysis of MAC Protocols for Wireless Control Area Network," 1996 IEEE, pp. 494-499.	<input type="checkbox"/>	
	100	Office Action English translation dated July 4, 2008 issued from Chinese Patent Office for Application No. 03814391.7.	<input type="checkbox"/>	
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	102	Official communication issued from the European Patent Office dated August 7, 2007 for the corresponding European patent application No. 03759271.4-2412.	<input type="checkbox"/>	
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	104	Supplementary European Search Report - EP03759271, Search Authority - Munich Patent Office, 09-14-06 (080590EP).	<input type="checkbox"/>	
	105	Translation of Office Action in Japanese application 2004-515701, corresponding to US application 10/516,327, citing WO00050971, JP2000-031877, JP2002-033691, JP2002-111571 and JP11-127104. Dated 2010-05-25 (080583JP).	<input type="checkbox"/>	
	106	Translation of Office Action in Japanese application 2004-544751, corresponding to US application 10/531,078, citing WO00050971, JP2002-111571, JP05-102907, JP63-160442, JP2000-502218, JP10-032557 and JP2000-082983. Dated 2009-08-25 (080590JP).	<input type="checkbox"/>	
	107	Translation of Office Action in Japanese application 2004-553510, corresponding to US application 10/533,589, citing WO00050971, JP09-182155, JP64-011428 and JP62-040895. Dated 2009-09-29 (080588JP).	<input type="checkbox"/>	
	108	Translation of Office Action in Japanese application 2004-565505, corresponding to US application 10/563,471, citing JP08-097762 and JP2001-111575. Dated 2009-08-11 (080589JP).	<input type="checkbox"/>	
	109	Translation of Office Action in Japanese application 2004-565505, corresponding to US application 10/563,471, citing JP08-097762, JP2001-111575, JP09-018484 and JP11-055713. Dated 2010-09-14 (080589JP).	<input type="checkbox"/>	
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		<b>Filing Date</b>	2003-10-15	
		<b>First Named Inventor</b>	GAINEY, Kenneth M.	
		<b>Art Unit</b>	2618	
		<b>Examiner Name</b>	Sanh D. Phu	
<b>Sheet</b>	8	<b>of</b>	9	<b>Attorney Docket No:</b> 080590

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		application 10/563,471, citing JP09-018484. Dated 2010-02-23 (080589JP).		
	111	Translation of Office Action in Korean application 2008-7026775, corresponding to US application 11/730,361, citing KR100810929 Dated 2010-08-30 (080600KR).	<input type="checkbox"/>	
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